

**IN THE CLAIMS**

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Currently Amended) A debugging system comprising a host computer system and a target device, said target device having an embedded digital processor on an integrated circuit chip, an on-chip emulation device, wherein said on-chip emulation device is contained entirely on-chip, coupled to said digital processor, the on-chip emulation device being operable to control said digital processor and to collect information about the operation of said digital processor, the on-chip emulation device having a communication port operable to receive information from and emit information to the host computer system wherein said debugging system further comprises an interface on said integrated circuit chip having a first port connected to said communication port of said on-chip emulation device and a second port connected to a universal serial bus, said host computer system having a universal serial bus port connected to said universal serial bus wherein said host computer system comprises a proxy server program for managing the universal serial bus port to enable communication over said universal serial bus, and said host computer further comprises application software in use communicating with the proxy server program and hence via said universal serial bus, with the ~~or each~~ embedded digital processor.

2. (Original) The system of claim 1 wherein said target device has plural said embedded digital processors of said chip.

3. (Currently Amended) A method of debugging an integrated circuit chip by communicating between application programs running on a host computer system and a device on said integrated circuit chip, the chip comprising digital processing circuitry and on-chip emulation circuitry, wherein said on-chip emulation circuitry is contained entirely on-chip, for communicating with and control of said digital processing circuitry, the on-chip emulation circuitry having a communications port for receiving information from said host computer

system and for passing information to said host computer system, the integrated circuit chip further having an on-chip usb interface connected to a target usb port, and the host computer system having a host usb port, the method comprising: converting said host usb port to said target usb port; running a proxy server program on said host computer system, causing a said application program to connect to said proxy server program, whereby said proxy server program connects to said device on said chip via said host and target usb ports.

4. (Currently Amended) A method of operating an integrated circuit chip having digital processing circuitry and on-chip emulation circuitry, wherein said on-chip emulation circuitry is contained entirely on-chip, for communicating with, and control of said digital processing circuitry, the on-chip emulation circuitry having a communications port for receiving information from a remote computer system and for passing information to said remote computer system, said integrated circuit chip further having an on-chip usb interface connected to a usb port, the method comprising converting said usb port to the usb port of a host computer, wherein said host computer is capable of Internet connection; running a proxy server process on said host computer; generating a remote procedure call in said chip; transferring said remote procedure call via said usb to said proxy server process; converting said remote procedure call to a socket call; and thereby communicating between said chip and the Internet.